# Multidisciplinary Care

# Multidisciplinary Cancer Care With a Patient and Physician Satisfaction Focus

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# **Abstract**

**Purpose:** Cancer treatment can be a complex and confusing process for both the patients and the care providers. With an ever-increasing array of treatment options, a push toward personalized medicine, and a complex payer system, coordination of cancer care is essential in streamlining the process. At Intermountain Healthcare, we have developed a hospital-based multidisciplinary cancer clinic that provides coordinated and comprehensive treatment planning in a single visit. Provider participation is open to employed, affiliated, and community physicians

**Methods:** The first multidisciplinary clinic, which was for breast cancer, was held in 2005. Similar clinics for other tumor types have subsequently been instituted, including clinics for genitourinary/prostate, Gl/liver/pancreas, sarcoma, and thoracic cancer. Each clinic is staffed by a surgeon, medical oncologist, radiation oncologist, and other specialists as needed. Clinic meetings are

held immediately following a specialty tumor conference during which each patient is discussed. The patients then meet one-on-one with each specialist and leave the clinic with an individualized treatment plan. Patient and physician satisfaction surveys are regularly conducted. Financial metrics are calculated to track downstream revenue.

**Results:** Satisfaction with the clinic has been high, and 98% of patients rated their overall experience as "excellent." Physicians also give the clinic high marks, crediting it with improving communication, building patient confidence, and increasing efficiency.

**Conclusion:** The multidisciplinary clinic at Intermountain Healthcare has greatly improved the cancer care process for patients, physicians, and the community. If implemented appropriately, multidisciplinary clinics have the potential to enhance quality of care and increase downstream revenue.

### Introduction

When patients are diagnosed with cancer, they suddenly enter a confusing, often intimidating world of doctors, diagnostic tests, and treatments. As the number of treatment options expands, physicians often find it challenging to stay current with the rapidly changing science. As a result, even specialists like oncologists tend to limit their practice to specific cancer types. In this world of subspecialization, there is an increasing need to coordinate care among providers, ensuring that patients successfully negotiate the complexities of cancer care.

This article describes the experience of implementing a community-based multidisciplinary clinic at Intermountain Healthcare, a not-for-profit health care system based in Salt Lake City, Utah, that consists of 24 hospitals(15 urban and nine rural). It also operates 130 community clinics throughout the state of Utah. This network provides services for approximately 60% of Utah residents.

The first multidisciplinary cancer clinic (MDCC) was implemented by Intermountain Healthcare in 2005. There are currently several subspecialty clinics for multiple cancer types: breast, genitourinary/prostate, GI/liver/pancreas, thoracic, and sarcoma. These clinics have been quite successful, greatly improving patient care as well as communication among subspecialties.

# Background

In early 2004, a small team of interested physicians, nurses, and administrators met to discuss the concept of a multidisciplinary breast clinic. The meeting was precipitated by frustration at an inability to fully assist patients as they navigated the complex system in which they were receiving care. Intermountain Healthcare was also in a competitive market for cancer care; we felt that an MDCC would set us apart from our competitors. It has been reported that patients' satisfaction increases when their psychosocial needs pertaining to their care are met. In 1998, Intermountain Healthcare had successfully implemented a multidisciplinary breast tumor conference that was well-attended by radiologists, pathologists, surgeons, medical oncologists, and radiation oncologists. In addition, there was a full compliment of ancillary support attendees that included nurses, social workers, clinical trials coordinators, and genetics counselors. Although each case was discussed in detail and treatment plans were formulated, the full effect of that conference was not evident to the patient. It seemed that the next logical step was to bring the patient to the team.

We were aware that the clinic concept—one versus multiple consultations in a single clinic visit—was practiced at major cancer centers. However, there was little published information concerning such a clinic in a community hospital environment. We were fortunate to have several physician champions who were willing to support the development of the MDCC. Phy-

sician champions are knowledgeable in their areas of expertise and are acknowledged as leaders and respected by their colleagues. These physiciasn also command the respect of physicians not in their field.<sup>2</sup>

As part of the planning process, a nurse administrator and hospital administrator made a site visit to a cancer center in the Midwest that was similar to Intermountain Healthcare. Although this center was in the early stages of development, we nonetheless learned a great deal from the visit about clinic logistics and physician contracting solutions. A breast clinic pilot was held, during which we saw 14 patients with newly diagnosed breast cancer and learned a great deal about how an MDCC would work logistically in our system. Patient feedback was positive, and the physician participants were energized to continue with an implementation plan.

After the pilot, the team submitted a formal proposal to acquire space and funding for the clinic. The proposal included outcomes measures for financial viability as well as patient and physician satisfaction. A successful financial outcome was not tied to the clinic itself having a positive margin, but to increased downstream revenue. Physicians from all specialties were formally invited to participate. The invitation was extended to both affiliated and unaffiliated practitioners. Participating physicians were contracted at an hourly fee, which was determined by using a national survey of hourly wages by specialty. The model for the clinic was hospital-based. In this model, the hospital assumed financial and staffing responsibilities. Professional billing was also provided by the hospital. In addition, there was a facility fee to offset the ancillary staff expenses.

Once the model and payment structure were in place, the hard work of recruiting physicians began. Our physician champions were crucial to this process. In addition to attending all planning meetings, they met one-on-one with employed, affiliated, and community physicians. The physician schedule was filled before the first patient visit to the clinic. Physicians were recruited from surgery, radiation therapy, and medical oncology. Marketing efforts were directed to physicians who were in a position to refer to the clinic. The breast clinic was launched in July of 2005.

The success of the clinic, as evidenced by patient satisfaction and increasing attendance, soon became evident to providers in other cancer-related specialties. Similar clinics for other tumor types were subsequently instituted, including clinics for genitourinary/prostate, GI/liver/pancreas, sarcoma, and thoracic cancers.

# **Methods**

As soon as a patient is diagnosed with cancer and referred to the MDCC, the care coordination process begins. The nurse navigator initially contacts the patient, explaining in detail the purpose and function of the clinic. Verification of insurance coverage is a patient responsibility, and financial assistance may be available for the uninsured. With this initial contact, the patient begins to appreciate the process: a multidisciplinary team approach, which ensures communication among all care providers. Moreover, the patient also understands that expert physicians will review the pertinent aspects of each case, including imaging, pathology, and laboratory tests. This review takes place in

the weekly specialty tumor conference held just before the clinic appointment. During the conference, the conference participants will formulate a consensus treatment plan for each patient. When appropriate, enrollment onto a clinical trial is recommended.

Before the clinic appointment, a nurse practitioner contacts the patient, taking the patient history by telephone (the physical exam is performed during the clinic visit). Both are documented by the nurse practitioner and placed in the patient's medical record. Upon arrival in the clinic, the patient is greeted and subsequently interviewed by the nurse navigator. Vital signs are documented, and a quick assessment of overall well-being is made. Each specialty physician individually consults with the patient. During the consultation, the physician subspecialists relay details regarding their specific treatment modalities, even if their specialty is not recommended for this particular patient. If clinically indicated, additional diagnostic tests or procedures are ordered and scheduled by the nurse navigator. The patient also meets with other providers, including a social worker, a dietician, a genetic counselor, a lymphedema specialist, or a physical therapist.

At the conclusion of the visit, the nurse navigator again meets with the patient, reviewing the visit and the treatment plan. The treatment plan is developed over the course of the clinic and is based on the recommendations of the clinic physicians. If treatment is to begin immediately, the appointments are made before the patient leaves the clinic setting. After the clinic, the nurse navigator continues to provide support to the patient.

#### Results

Success of the MDCC is measured principally by patient and physician satisfaction surveys, but measurement also includes downstream revenue as a financial metric. Downstream revenue is calculated by determining revenue generated by surgery, pathology, laboratory, imaging, chemotherapy, radiation therapy, and in-patient services. Although the clinic itself is not profitable, patients who attend clinic are responsible for statistically significantly higher downstream revenue than nonclinic patients.<sup>3</sup> There was no formal physician downstream financial evaluation. However, the hospital-based financial analysis demonstrates that patients remain in the Intermountain Healthcare system rather than choose a local competitor.

Each patient is given a survey at the end of the clinic visit. The survey can be taken home, completed, and then mailed back in a self-addressed stamped envelope. Over the last five years, the patient feedback has been invaluable and instructive. Many participants have observed that the unhurried atmosphere of the clinic is an excellent forum for asking questions. The thoughtful, detailed responses to their questions provide a better understanding of the diagnosis and treatment plan. Our surveys demonstrate that patients who present to the MDCC are more confident and better prepared to assume an active role in their own care. They especially value the patient-specific information that they receive. As one participant said, "The entire team seemed genuinely interested in providing information for my specific cancer and my treatment options." The clinic experience has emphasized the team approach. Not only do patients realize that the medical staff is on their team, they appreciate that they too are team members. After going

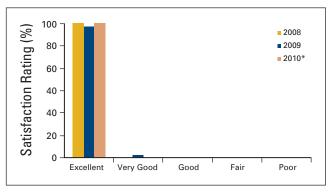


Figure 1. Clinic satisfaction.

through the clinic, a grateful patient observed, "We were treated with respect and had the understanding that we are a part of the team." As shown in Figure 1, 98% of our patients gave us an excellent rating on the overall clinic experience.

Given that the clinic is dependant on our physician specialists, physician satisfaction is also critical. We encourage their input and survey their satisfaction regularly. Although some physicians are concerned that the MDCC is not the most efficient use of their time, they all admit that the time allotted is essential. They feel the real-time interaction of all oncologic subspecialties is extremely beneficial and elevates the level of care. As a result of busy schedules and different office locations, this real-time discussion is nearly impossible outside the clinic setting. Impressed by the didactic nature of the tumor conference and clinic, one physician recently observed, "I have gained a better vision of what other disciplines are doing. It has strengthened my practice." The physicians also feel that the clinic is especially valuable for more complex cases. The value to community oncologists is time saved in the office. According to one local oncologist, "I can discuss the medical oncology point of view with the patient and then refer the patient to clinic. In clinic, they get the surgical and radiation oncology perspectives, plus a second opinion from another medical oncologist."

Often subspecialty cancer treatment produces a communication gap between treating oncologists and primary care or referring physicians. To distinguish our program from a local competing cancer center, it was important that we close this communication gap. The MDCC provides direct feedback to the referring physician. After every appointment, a copy of the treatment plan and the dictated notes from the subspecialists are sent to the primary care provider. Initially, some referring physicians felt they were not receiving the information in a timely manner. To address this concern, the nurse navigators now provide a brief summary, which is sent by e-mail or fax within 24 hours of the clinic visit. This summary includes the treatment plan and a brief personal note from the nurse summarizing the salient events of the clinic visit. This summary has been

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well-received by the referring physicians. One of the primary care providers indicated that the summary helps him discuss the treatment plan with the patient in a timely manner, allowing him to remain an active member of the team.

#### **Discussion**

Implementation of an MDCC is possible in a community setting, but it requires careful planning, commitment, and a supportive physician culture. The clinic has the potential to greatly improve care coordination between treating physicians and enhance communication with patients. Through the clinic, physicians can easily discuss cases, learn from their colleagues, and decide which treatments are most appropriate for each individual patient. Patients are provided with a comprehensive treatment plan and leave the clinic with a clear understanding of what to expect during cancer treatment.

MDCCs have high levels of satisfaction expressed by both patients and physicians. They are a vital mechanism to ensure that patients receive high-quality care that results in the best possible outcomes. At the same time, MDCCs reduce the burden on physicians to coordinate care with other providers. It addition, the clinic is a rich source of expertise that is especially helpful in difficult cases.

Overall, the MDCC at Intermountain Healthcare has greatly improved the cancer care process for patients, physicians, and the community. As cancer care continues to evolve, multidisciplinary clinics are likely to become more common, forming an essential component of any comprehensive cancer program. If implemented appropriately, MDCCs have the potential to enhance quality of care and improve outcomes.

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Authors' Disclosures of Potential Conflicts of Interest
The authors indicated no potential conflicts of interest.

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